

REMARKS

General

Applicant gratefully acknowledges the Examiner's Office Action dated September 12, 2006. Applicant has cancelled Claims 1-26 and the Examiner has acknowledged the same. Further, the Examiner's claim objection to Claim 45 on numbered Page 2 of the Office Action is acknowledged and addressed below.

However, the Examiner's rejections of Claims in the referenced Office Action are respectfully traversed. The Examiner has rejected all pending claims of the instant application -- that is, Claims 27-46.

In particular, the rejections included the following: on numbered Pages 2-4 of the Office Action, Claims 27-32, 34-41, and 43-46 rejected under 35 U.S.C. §103(a) as being unpatentable over Papetti (US Patent No. 4,726,708) in view of Taguchi et al. (US Patent No. 5,200,261); further, on numbered Page 4 of the Office Action, Claims 33 and 42 rejected under 35 U.S.C. §103(a) as being unpatentable over Papetti in view of Taguchi as applied to independent claims 27 and 36, and also in further view of Ragazzo (US Patent No. 5,636,938).

Additionally, to the extent that the Examiner's comments are not now moot in view of the amendments to the claims and the like, Applicant believes that the Examiner's concerns have been fully addressed, as presented on numbered Pages 5-11 of the Office Action.

Finally, Applicant believes that all of the Examiner's viable (i.e., not moot) objections, rejections, and other comments and concerns (as addressed in the Examiner's "Response to Arguments" on numbered Pages 5-11 of the Office Action) are fully addressed in this paper vis-a-vis the rejected Claims 27-46.

Petition for One-Month Extension of Time

Applicant previously filed a petition for a one-month extension of time with appropriate fee for a small entity, pursuant to §1.136(a), on January 11, 2007. Further, the reply to the Advisory Action of April 13, 2007 is filed within the one-month shortened statutory period for reply and therefore no additional extension of time or fee is required in accordance with the rules of practice. Therefore, Applicant respectfully requests that this reply be considered as *timely filed*.

Independent Claims

Independent Claim 27

Independent Apparatus Claim 27 (from which Dependent Claims 28-35 depend, indirectly or directly) recites a portable roadway comprising the following: a support layer having a top surface and a traffic layer for supporting construction vehicle traffic.

In particular, Independent Claim 27 provides that the support layer comprises of a wire mesh top surface. The wire mesh top surface defines at least one closed gabion. The support layer further comprises a plurality of wire mesh gabions, each having a plurality of compartments. Each compartment is substantially full of a filler material having a density less than that of water.

Moreover, as indicated above, the portable roadway of Independent Claim 27 also comprises a traffic layer supported by the wire mesh top surface. The traffic layer comprises of a plurality of panels which are placed on the wire mesh top surface. The panels are removeable.

The above recited features of Independent Claim 27 constitute a portable roadway which has sufficient strength to support construction vehicle traffic (this is also recited in Claim 27).

Independent Claim 36

Independent Apparatus Claim 36 (from which Dependent Claims 37-44 depend, indirectly or directly) recites a portable platform comprising the following: a support layer having a top surface and a traffic layer for supporting construction vehicle traffic.

In particular, Independent Claim 36 provides that the support layer comprises of a wire mesh top surface. The wire mesh top surface defines at least one closed gabion. The support layer further comprises a plurality of wire mesh gabions, each having a plurality of compartments. Each compartment is substantially full of a filler material having a density less than that of water.

Moreover, as indicated above, the portable platform of Independent Claim 36 also comprises a traffic layer supported by the wire mesh top surface. The traffic layer

comprises of a plurality of panels which are placed on the wire mesh top surface. The panels are removeable.

Accordingly, these recited features of Independent Claim 36 constitute a portable platform which has sufficient strength to support construction vehicle traffic (this is also recited in Claim 36).

Independent Claim 45

Independent Method Claim 45 recites a method for constructing a portable roadway or a portable platform. This method comprises: a) providing a support layer having a top surface; and, b) providing a traffic layer supported by the wire mesh top surface.

In particular, Independent Claim 45 recites a method for constructing a portable roadway or a portable platform which provides a support layer having a wire mesh top surface. The wire mesh top surface defines at least one closed gabion. The support layer comprises a plurality of wire mesh gabions, each having a plurality of compartments. Each compartment is substantially full of a filler material having a density less than that of water.

Moreover, as indicated above, the method of Independent Claim 45 also provides a traffic layer which is supported by the wire mesh top surface. The traffic layer comprises of a plurality of panels which are placed on the wire mesh top surface. The panels are removeable.

Accordingly, these recited features of Independent Claim 45 constitute a portable platform which has sufficient strength to support construction vehicle traffic (this is also recited in Claim 45).

As recited in Independent Claim 45, the method for constructing a portable roadway or a portable platform comprises the providing of the portable roadway or portable platform, as described above. Each portable roadway and each portable platform that is constructed from the method as recited in Independent Claim 45 possess the physical characteristic of having sufficient strength to support construction vehicle traffic.

Claim Objections

Claim 45

Applicant gratefully acknowledges Examiner's claim objection to Claim 45 on numbered Page 2 of the Office Action dated September 12, 2006 ("Office Action"). Accordingly, the preamble of method Claim 45 is amended so that it is understood that the Claim concerns a method "for constructing a portable roadway or a portable platform."

Additionally, for the sake of clarity and consistency, Independent Method Claim 45 has been amended in accordance with the currently amended Independent Apparatus Claims 27 and 36, with the addition of the gerund "providing" for the otherwise substantially similar clauses (a) through (b). Redundant verbiage contained in the prior version of Claim 45 in clauses (c) through (f) has been redacted as shown in redline. Further, the previous recitations of "a portable roadway" and "a portable platform" in the body of Claim 45 have been replaced with "said portable roadway" and "said portable platform" for proper antecedent bases as to each – this is also shown in redline.

Further, because Claim 45 recites a method for constructing a portable roadway or a portable platform comprising providing a support layer and providing a traffic layer (as described above), the "wherein" clause has been amended to clarify that *each* portable roadway and *each* portable platform which is constructed using this method have sufficient strength to support construction vehicle traffic.

Claim Rejections

35 U.S.C. §103 - Papetti

Claims 27-32, 34-41, and 43-46

Applicant respectfully acknowledges that the Examiner has rejected Claims 27-32, 34-41, and 43-46 under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 4726708 to Papetti ("Papetti"), in view of U.S. Patent No. 5,200,261 to Taguchi ("Taguchi") on numbered Page 2 of the Office Action.

Inapplicability of Papetti

The Examiner's characterization of Papetti as disclosing "a temporary road and a method of making" the same on numbered Page 2 of the Office Action is not founded. Nowhere in Papetti is there a teaching, suggestion, or motivation to use the mattress-type gabion as a temporary roadway or platform, let alone the method for making such a temporary roadway or platform.

Instead, Papetti provides for a "mattress-type gabion for use as a covering...for preventing soil erosion caused by surface water and infiltration, and for consolidating soil against landslides...[caused by a plurality of reasons including]... road construction...."

Therefore, while "road construction" is *incidentally* referred to, it is just one example, among others provided in Papetti, which relates to the problem of landslides and the need for soil reinforcement by way of the mattress-type gabion system.

Accordingly, the use of Papetti as a primary reference in view of 35 U.S.C. §103(a) was improper.

Invention Distinguished from Papetti

To further distinguish Applicant's Claims 27-32 and 34-35 as rejected by the Examiner in view of 35 U.S.C. §103(a), Applicant respectfully emphasizes that: Independent Claim 27 is directed to a portable roadway, unlike Papetti for the above-mentioned reasons.

Claims Distinguished from Papetti

Dependent Claims 28-32 and 34-35, which directly or indirectly depend from Independent Claim 27, have the following additional distinguishing aspects:

Claim 28 (depends from Independent Claim 27) (filler material is expanded polystyrene foam);

Claim 29 (depends from Independent Claim 27) (filler material is encapsulated in a fabric wrapper);

Claim 30 (depends from Dependent Claim 29) (fabric wrapper is polypropylene yarn);

Claim 31 (depends from Independent Claim 27) (filler material in at least one of the gabion compartments is in the form of a single block);

Claim 32 (depends from Independent Claim 27) (the gabion is a mattress gabion);

Claim 34 (depends from Independent Claim 27) (at least one of the panels is either a wood or metal panel); and,

Claim 35 (depends from Independent Claim 27) (at least some of the panels are interlockable with one another).

Additionally, to further distinguish Applicant's Claims 36-41 and 43-44 as rejected by the Examiner in view of 35 U.S.C. §103(a), Applicant respectfully emphasizes that Independent Claim 36 is directed to a portable platform, unlike Papetti for the above-mentioned reasons.

Moreover, Dependent Claims 37-41 and 43-44, which directly or indirectly depend from Independent Claim 36, have the following additional distinguishing aspects:

Claim 37 (depends from Independent Claim 36) (filler material is expanded polystyrene foam);

Claim 38 (depends from Independent Claim 36) (filler material is encapsulated in fabric wrapper);

Claim 39 (depends from dependent Claim 38) (fabric is propylene yarn);

Claim 40 (depends from Independent Claim 36) (filler material in at least one of the gabion compartments is in the form of a single block);

Claim 41 (depends from Independent Claim 36) (at least one of the gabions is a mattress gabion);

Claim 43 (depends from Independent Claim 36) (at least one of the panels is either wood or metal); and,

Claim 44 (depends from Independent Claim 36) (at least some of the panels are interlockable with one another).

Additionally, to further distinguish Applicant's Claims 45-46 as rejected by the Examiner in view of 35 U.S.C. §103(a), Applicant respectfully emphasizes that: Independent Claim 45 is directed to a portable roadway or platform, unlike Papetti for the above-mentioned reasons. Dependent Claim 46 directly depends from Independent Claim 45 and has the additional distinguishing aspects of additional method steps including: providing a fabric wrapper for the filler material, selecting at least a portion of the filler material to be expanded polystyrene foam, and encapsulating the expanded polystyrene foam within the fabric wrapper prior to placing the expanded polystyrene foam into one of the compartments of the wire mesh gabion.

Applicant respectfully requests that Claims 27-32, 34-41, and 43-46 be allowed in view of the Examiner's misapplication of Papetti as a primary reference and Applicant's further distinctions of the Claims.

35 U.S.C. §103 – Taguchi
Claims 27-32, 34-41, and 43-46

While Applicant respectfully agrees with Examiner, on numbered Page 3 of the Office Action, that Papetti does not disclose the type of ballast material being used, Applicant wishes to respectfully clarify the true meaning of "ballast" and explain why Examiner has misapplied the primary reference (Papetti) and the secondary reference (Taguchi) to Applicant's invention.

Invention Distinguished from Taguchi

First, Applicant's specification does not expressly or implicitly refer to *ballast material*, though it does refer to *buoyant* material having a density less than water. Applicant respectfully refers Examiner to Independent Claims 27 (and Dependent Claims 28-35), 36 (and Dependent Claims 37-44), and 45 (and Dependent Claim 46)), each of which are apparatus and/or method claims which provide for filler material "having a density less than water."

Second, Applicant respectfully refers the Examiner to one of the Examiner's cited references: US Patent No. 5,636,938 to Ragazzo ("Ragazzo"). In col. 1, lines 21-40, Ragazzo provides the meaning of "ballast" as being "hard durable material" (col. 1, line 18), such as "stone or gravel" or "slag or broken concrete" (col. 1, lines 37-38). As can be seen by these provided examples, these ballast materials are not akin to, for example, Applicant's filler material having a density less than that of water (e.g., expanded polystyrene foam) – rather, the use of "ballast" as defined in Ragazzo refers to *heavy* material such as stone, gravel, or broken concrete. To further illustrate this point, Ragazzo further explains, "[t]he main property of ballast is that the material be of sufficient weight to act as ballast." This physical property of ballast is likewise not akin to Applicant's invention which requires filler material "having a density less than water" as per the above-mentioned Claims – in other words, unlike Applicant's use of *buoyant* material, the "ballast" material as defined by Ragazzo is *not* buoyant material, but rather a heavy material such as stone, gravel, slag, or broken concrete.

Inapplicability of Taguchi

Accordingly, because Applicant's invention does not utilize ballast material (for the reasons as explained above of this paper), the Examiner's reliance on the primary reference of Papetti (which refers to "ballast material") is unfounded.

Moreover, Applicant respectfully acknowledges the Examiner's discussion of Taguchi as a secondary reference in rejecting the above-mentioned Claims. However, Applicant respectfully emphasizes that Taguchi provides for the use of "*fiber reinforced foamed materials*" in the gabion system (which Examiner has quoted on numbered Page 4 of the Office Action) (emphasis added). This is not -- as Examiner states and/or otherwise implies -- a characteristic of filler material *having a density less than that of water* such as, for example, expanded polystyrene foam itself. Rather, Taguchi teaches a method and apparatus, both of which comprise a "foamable material...with the composite fibers or composite yarns...so as to reinforce the foamed body." See Taguchi (abstract; col. 3 lines 4-23; col. 3 lines 30-38; col. 9 lines 63-68; and, col. 10 lines 1-49). In contrast, Applicant's instant invention discloses and claims filler material having density less than that of water such as, for example, expanded polystyrene foam.

Also, Taguchi's utilization of a *fiber-reinforced* foamable material teaches away from Applicant's use of, for example, expanded polystyrene foam or some other material having

a density less than that of water (as discussed in more detail above).

Regarding the rejection of Independent Claim 27 (and Dependent Claims 28-32 & 34-35), Independent Claim 36 (and Dependent Claims 37-41 & 43-44), and Independent Claim 45 (and Dependent Claim 46), with respect to Papetti alone or in combination with Taguchi, please refer to the distinctions discussed above in connection with Papetti.

Therefore, in view of all of the foregoing, Applicant respectfully requests that Claims 27-32, 34-41, and 43-46 be allowed.

35 U.S.C. §103 – Ragazzo
Claims 33 & 42

On numbered Page 4 of the Office Action, the Examiner has rejected Dependent Claim 33 (which directly depends from Independent Claim 27) and Dependent Claim 42 (which directly depends from Independent Claim 36) under 35 U.S.C. §103(a) as being unpatentable over Papetti in view of Taguchi and in further view of Ragazzo.

Inapplicability of Ragazzo

For the above-mentioned reasons with regard to the inapplicability of the Papetti primary reference (as discussed above) and the Taguchi secondary reference (as discussed above and further below), Applicant respectfully refers the Examiner to the respective discussions above.

Ragazzo is directed to the art of traditional gabion systems with ballast material. "The invention relates broadly to the art of Gabion Systems." (See Ragazzo, col. 1, line 5.) "Gabion Systems are containers or cages filled with ballast." (See Ragazzo, col. 1, line 16 (emphasis added).) Accordingly, Ragazzo is directed to *ballast material*, whereas Applicant's invention involves *lightweight* material having a density less than that of water (i.e., non-ballast material). (As stated previously, the *ballast* material referred to in Ragazzo such as stone, gravel, and the like would *not* be considered *buoyant* material, but rather, dense (i.e., heavy) material and certainly more dense than Applicant's use of *buoyant* material which has a density less than that of water.) Please refer to the above-referenced discussion of Papetti and Taguchi, respectively.

Further, while Applicant respectfully acknowledges the Examiner's quotation of Ragazzo with regard to the use of poly-vinyl chloride ("PVC")-coated gabions and that Claims 33 and 42 recite the same material, for the above-mentioned reasons and discussion, Applicant respectfully disagrees with the Examiner that Papetti in view of Taguchi disclose essentially all that is claimed for the same reasons as stated above.

Likewise, although the Examiner does not address this specifically, Applicant would like to clarify further that even Ragazzo, *alone*, does not disclose essentially all or actually all that is claimed. Similar to the *above* discussion of Papetti and Taguchi, Ragazzo does not teach, suggest, or provide the motivation to provide for a portable platform *or* a portable roadway. Moreover, also similar to the limitations (i.e., specifically, these references use *ballast* material, not *buoyant* material, as further explained above) of these two cited references as discussed above, Ragazzo does not utilize a lightweight (i.e., non-ballast) material in its gabion system; instead, Ragazzo utilizes *ballast* material. As also further explained above, ballast material is *not* utilized in Applicant's invention; rather, filler material having a density less than that of water such as, for example, expanded polystyrene foam, is used as *buoyant* material.

Finally, in light of the distinguishing features of Dependent Claim 33 (which directly depends from Independent Claim 27) and 42 (which directly depends from Independent Claim 36), as discussed above (see, esp., the above Papetti discussion) over the Papetti, Taguchi, and Ragazzo references, Applicant respectfully requests that these Claims be allowed.

Miscellaneous

Applicant gratefully acknowledges the Examiner's suggested language for amending Independent Claim 27 and respectfully requests that the newly amended language of Claim 27 be entered so this Claim is in allowable form. Moreover, consistent with the Examiner's suggestion on numbered Page 5 of the Office Action, instead of "top surface" this language is replaced by support layer having a "wire mesh top surface, wherein said wire mesh top surface defines at least one closed gabion" to define this structural aspect of the support layer of the portable roadway. In other words, this amendment would clarify that the support layer has a wire mesh top surface defined by at least one closed gabion, wherein Independent Claim 27

recites portable roadway comprising a plurality of wire mesh gabions.

Moreover, to address the Examiner's concern that "a plurality of panels" in Independent Claim 27 is not adequately defined in terms of structure, the Applicant respectfully requests that the currently amended language be entered so that Claim 27 is in allowable form. Specifically, Applicant has clarified by way of amendment to Claim 27 that the removeable panels are placed on the top surface of the support layer, thereby forming a traffic layer. Additionally, also for purposes of clarity, the Applicant has amended the placement of the "wherein" clause for clarity so that the "wherein" clause is separate from Claim 27(a) (referring to the support layer) and Claim 27(b) (referring to the traffic layer) since it relates to the strength characteristic of the portable roadway as a whole (i.e., with support layer and traffic layer combined), such that the portable roadway has sufficient strength to support construction vehicle traffic. Moreover, for clarity and readability, Applicant has redacted the term "comprising" from Claim 27(a) and Claim 27(b) and has replaced it with the term "comprises." Likewise, the analogous Independent Claim 36 (which differs from Independent Claim 27 only in that Claim 36 is directed to a "portable platform") has been amended to incorporate the same amendments as discussed herein for Claim 27 (including Claim 27(a) and Claim 27(b)).

Additionally for clarification purposes, Applicant respectfully requests that the Examiner enter in the amendment for Dependent Claim 30, which directly depends from Dependent Claim 29 and indirectly from Independent Claim 27, wherein the original term "fabric" is replaced by the phrase "fabric wrapper" to relate back to Dependent Claim 38 which states "a fabric wrapper," consistent with the Examiner's suggestion.

Likewise, Applicant respectfully requests that the Examiner enter in the amendment for Dependent Claim 39, which directly depends from Dependent Claim 38 and indirectly from Independent Claim 36, wherein the original term "fabric" is replaced by the phrase "fabric wrapper" to relate back to Dependent Claim 38 which states "a fabric wrapper," also consistent with the Examiner's suggestion.

As also discussed above, Independent Method Claim 45 (including Claim 45(a) and Claim 45(b)) has been amended so that it is consistent with the claim language of

Independent Apparatus Claims 27 and 36. Being that Claim 45 is a method claim, however, the gerund "providing" has been added to Claim 45(a) and Claim 45(b), in conformity with the requirements related to drafting method claims. Further, each method step of Claim 45 necessarily recites the apparatus limitations of Claims 27 and 36. In other words, Independent Method Claim 45 is a method which describes the function of the apparatus (which, in turn, relates to Independent Apparatus Claims 27 and 36). See Robert C. Faber, Landis on Mechanics of Patent Claim Drafting (5th ed. 2006), §§4:5-4:6.

Applicant also respectfully acknowledges the Examiner's comments on numbered Pages 6-11 of the Office Action. However, Applicant believes that all such remarks by the Examiner have been adequately addressed in this or the preceding sections.

Conclusion

In light of Applicant's amendments to the claims and the discussion in the preceding sections, Applicant respectfully requests that Claims 27-46 be allowed as expediently as possible. Moreover, Applicant respectfully requests that the Examiner call the Applicant's representative, Lee Kim, Esq., at (412)594-3915 with any questions, comments, or concerns.

Respectfully Submitted,



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